



FHWA NHTS REPORT

About the NHTS

Conducted periodically since 1969 by the Federal Highway Administration, the NHTS collects travel data from a sample of U.S. households. The information is used to understand trends in the Nation's trip-making and miles of travel by mode, purpose, and time-of-day for use in policy, planning, and safety.

Data are collected for household members for each day of the year, yielding a rich demographic profile linked to daily travel and vehicle characteristics.

For more information:

<http://nhts.ornl.gov>



U.S. Department of Transportation
Federal Highway Administration

TRENDS IN DISCRETIONARY TRAVEL

2017 National Household Travel Survey

February 2019

Introduction

Over the past three decades, life in the United States has changed significantly. Technological advancements have revolutionized shopping and personal interactions and have led to expanded opportunities for remote working and online classes. Many cities have invested in new social and recreational opportunities, and developers continue to respond to changes in the economy, both of which impact land use patterns and levels of density. From a travel behavior perspective, these technological and land-use changes translate into new travel patterns that are reflected in the proportion of trips for different purposes reported in the National Household Travel Survey (NHTS) as well as the distance, duration, and time of day of those trips.

This report presents an exploration of changes in travel behavior by focusing on trips for (1) shopping, (2) family/personal business, (3) visits with friends/family, (4) social/recreational, and (5) medical/dental purposes. These trip purposes are often referred to as “discretionary” travel, as compared to trips for work and school, which are characterized as taking place at a fixed location at scheduled times.¹

The purpose of each trip recorded on the assigned travel day was provided directly by NHTS respondents. The NHTS data series includes both the responses provided for each trip as well as a summary trip purpose variable that allows for comparison of trip purpose over time.⁽¹⁻⁵⁾ This report uses the summary trip purpose variable (i.e., WHYTRP90). Table 1 lists each summary trip purpose category used in this report as well as the underlying individual trip purposes respondents selected to describe their trip.

The remainder of this section provides an overview of the changes in these five discretionary trip purposes over

¹Work and school trips are explored in more depth in other reports in this series.

Table 1. Discretionary trip purpose definitions.

Discretionary Trip Purpose	Trip Purpose Categories Included in Composite Variable
Shopping	Buy goods (e.g., groceries, clothes, appliances, or gas)
Family/personal business	<ul style="list-style-type: none"> • Volunteer activities (not paid) • Drop off/pick up someone • Attend adult care • Buy services (e.g., dry cleaners, service a car, or pet care) • Other general errands (e.g., post office or library) • Buy meals (carry-out*)
Visits with friends/family	Visit friends or relatives
Social/recreational	<ul style="list-style-type: none"> • Perform recreational activities (e.g., visit parks, movies, bars, or museums) • Exercise (e.g., go for a jog, walk, walk the dog, or go to the gym) • Buy meals (e.g., go out for a meal, snack, or carry-out*)
Medical/dental	Make a health care visit (e.g., medical, dental, or therapy)

*"Buy meals" appears in two categories as it sometimes is a function (i.e., getting something to eat) and sometimes a social activity (i.e., going out with friends to dinner).

time, by weekday/weekend, vehicle availability, and home location. Then, in the second section, each purpose is explored in more detail, particularly with respect to changes in trip duration, trip distance, and time of day of travel. The final section of this report summarizes key trends in discretionary travel.

Figure 1 illustrates the changes in proportions of each of the five types of discretionary travel considered in this report.⁽¹⁻⁵⁾ Each trip purpose shows a different trend over the survey years. Trips for social/recreational activities increased in proportion each year, while those for family/personal business increased from 1990 to 1995 and then declined each successive year. Trips for shopping showed slight increases then decreases, with the 2017 level mirroring that of 1990. Trips to visit friends/family declined slightly over time, while those for medical and dental purposes increased slightly each year.

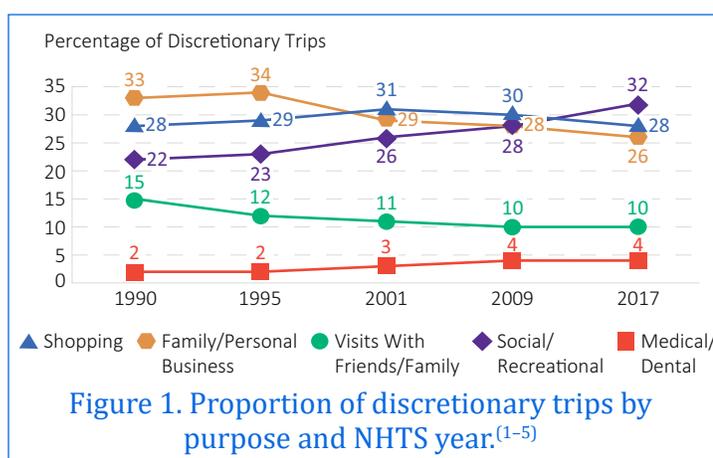


Figure 1. Proportion of discretionary trips by purpose and NHTS year.⁽¹⁻⁵⁾

Travel patterns are a reflection of where and how Americans choose to spend their day. From 2001 to 2017, the proportion of trips for work or school activities averaged 25% of weekday trips and 9% of weekend trips. It makes sense then that the distribution of discretionary trips varied between weekday and weekend, as illustrated in figure 2. Regardless of survey year, almost two-thirds of weekday discretionary travel was for family/personal business or shopping. On the weekends, almost two-thirds of travel was for social/recreational or shopping. In addition, trips for

family/personal business and medical/dental were reduced significantly on the weekend as compared to the weekday, while those for visiting friends/family almost doubled.

From a trend point of view, the proportion of social/recreation trips increased each survey year for both weekdays and weekends, while those for family/personal business declined steadily over time. The proportion of trips for shopping and medical/dental showed more variation over time without any real discernable pattern.

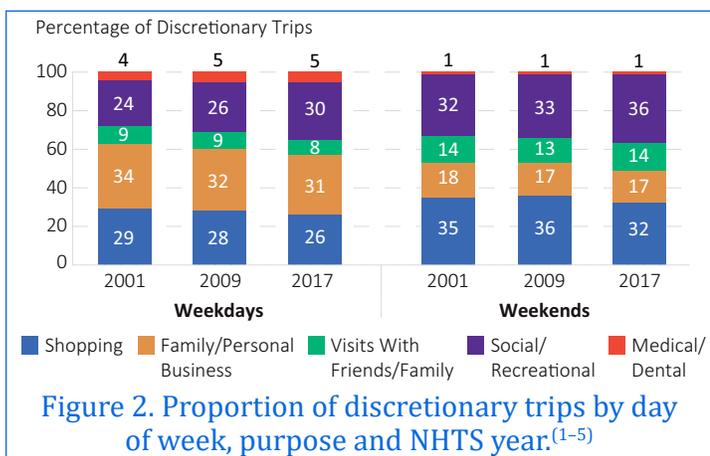


Figure 2. Proportion of discretionary trips by day of week, purpose and NHTS year.⁽¹⁻⁵⁾

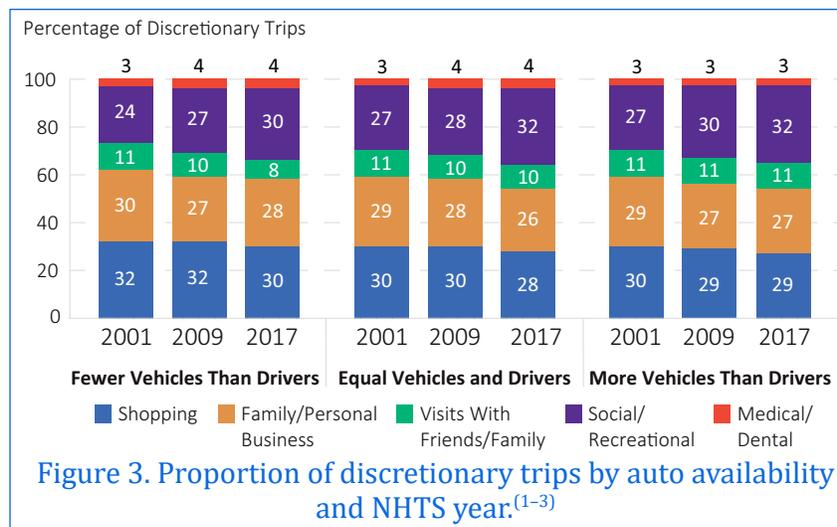


Figure 3. Proportion of discretionary trips by auto availability and NHTS year.⁽¹⁻³⁾

Travel behavior is often a reflection of the resources available to the household. In an auto-dominant society, access to an automobile changes the destination opportunities and results in differences in discretionary travel, as shown in figure 3. Across all survey years, persons living in households where there were fewer vehicles than drivers (i.e., members ages 16+ who self-identified as a driver or reported at least one trip as auto-driver) reported more

shopping and fewer social/recreational trips, while those living in households with more vehicles than drivers reported the opposite. Interestingly, the proportion of trips for family/personal

business, medical/dental, and to visit friends and family members were fairly consistent across time and across all types of households.

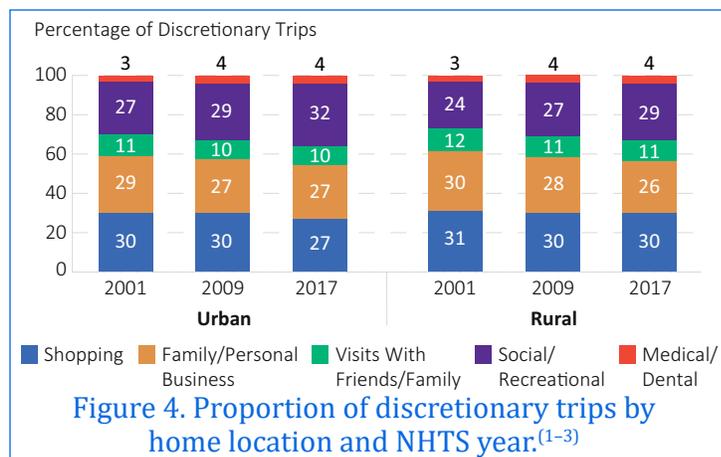


Figure 4. Proportion of discretionary trips by home location and NHTS year.⁽¹⁻³⁾

Persons living in households in rural areas consistently reported more trips for shopping and family/personal business, while those living in urban areas reported more trips for social/recreational purposes (see figure 4).

Shopping

Buy goods (e.g., groceries, clothes, appliances, or gas).

Highlights

About one in every three discretionary trips was for shopping purposes. The amount of time spent traveling for shopping trips has increased slightly over time (from 16.1 to 17.5 minutes), while the distance of shopping trips averages 7 miles. Shopping trips generally took place midday (10 am to 3 pm), although more recently, the trips were made earlier in the day (consistent with the fact that persons living in households with seniors reported the highest proportion of shopping trips).

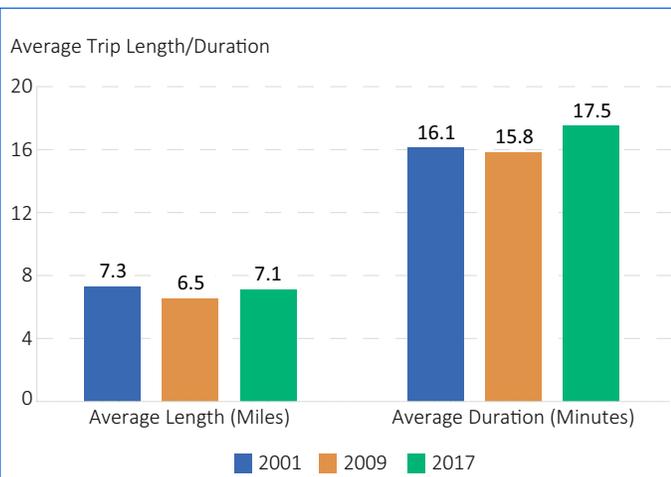


Figure 5. Average length and duration of shopping trips.⁽³⁻⁵⁾

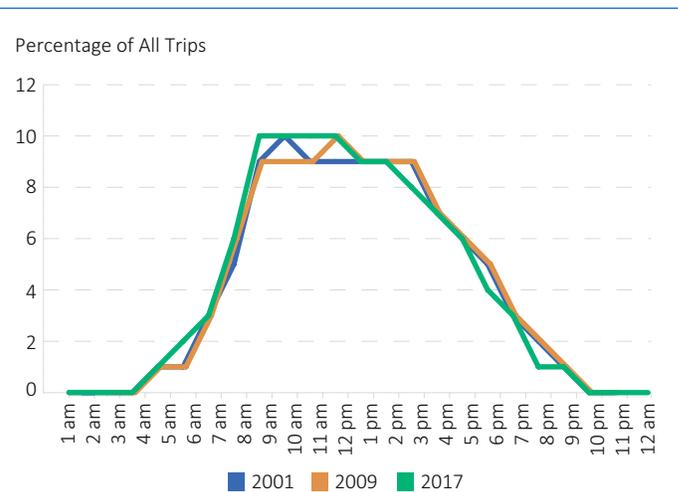
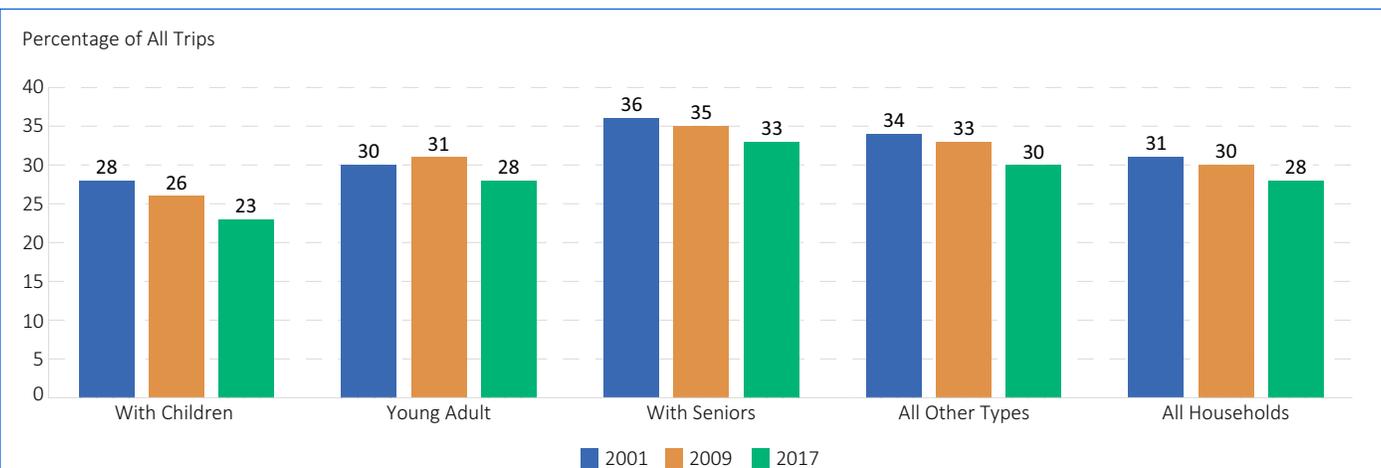


Figure 6. Shopping trips by time of day.⁽³⁻⁵⁾



*Young adults are defined as ages 18–25, and seniors are defined as ages 65+.

Figure 7. Shopping trips by household type.⁽³⁻⁵⁾

Family/Personal Business

Volunteer activities (unpaid), drop off/pick up someone, attend adult care, buy services (e.g., dry cleaners, service a car, or pet care), other general errands (e.g., post office or library), and buy meals (e.g., carry-out).

Highlights

Travel for family/personal business averaged about 30% of all discretionary trips, with a peak of 34% of all discretionary trips in 1995 and a low of 27% in 2017. These trips averaged 7 miles and 16 minutes in length. This type of travel tends to exhibit three distinct peaks—7 am, 12 pm, and 3 pm—and was most prevalent for those living in households with children.

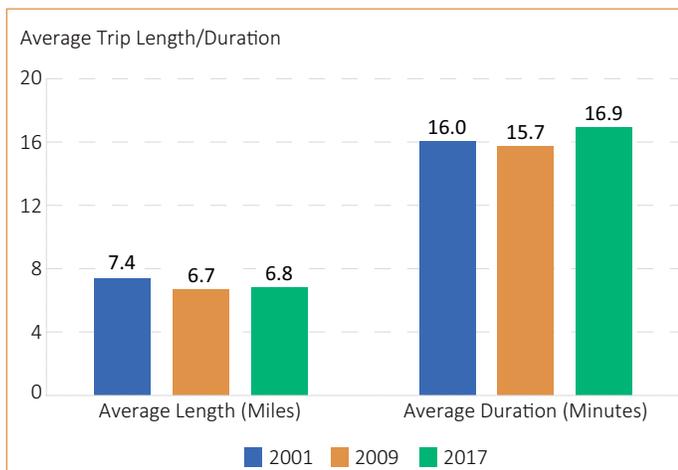


Figure 8. Average length and duration of family/personal business trips.⁽³⁻⁵⁾

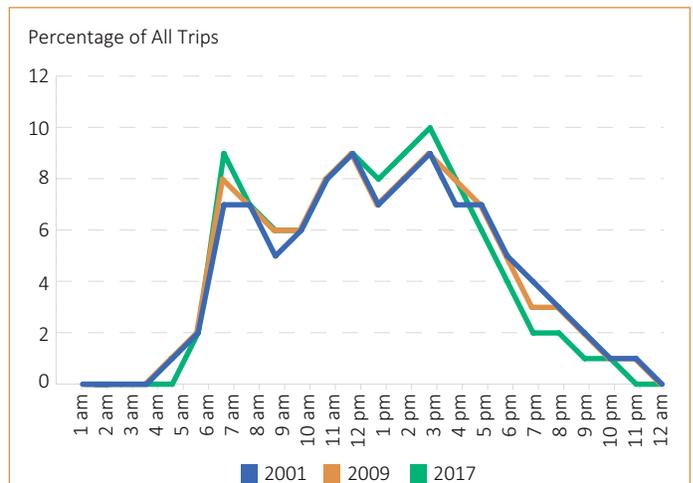
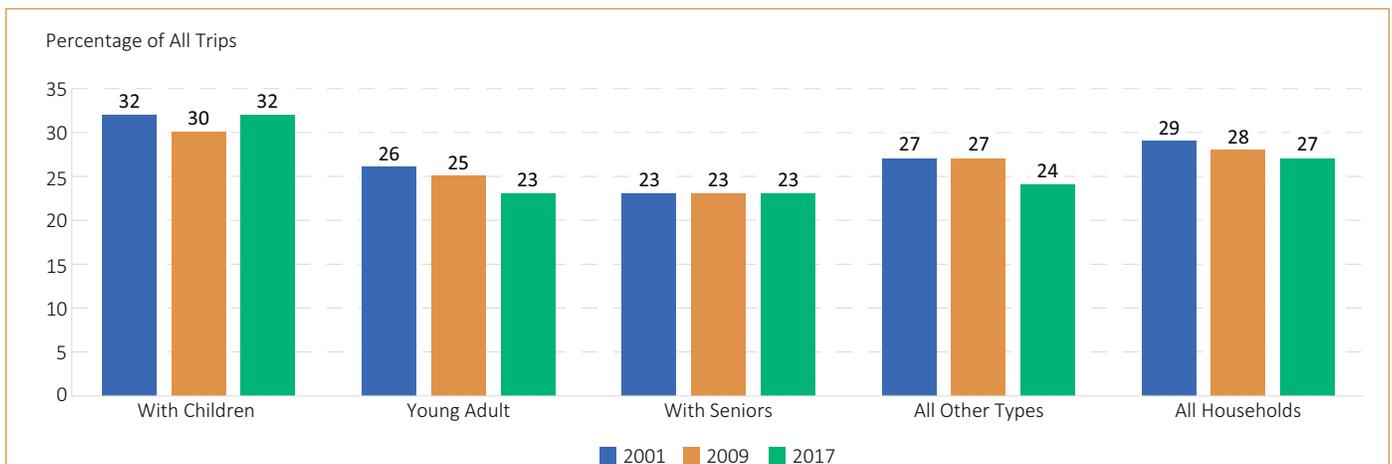


Figure 9. Family/personal business trips by time of day.⁽³⁻⁵⁾



*Young adults are defined as ages 18–25, and seniors are defined as ages 65+.

Figure 10. Family/personal business trips by household type.⁽³⁻⁵⁾

Visits With Friends/ Family

Visit friends or relatives.

Highlights

Trips for visiting friends/family have decreased in proportion, while the length of these trips in terms of both distance and duration has increased. The 2017 data show a trend toward visiting earlier in the day, with a new noon-time peak emerging. The highest proportion of trips for visiting friends and family was reported by persons living in households with young adults (defined in this report as ages 18–25).

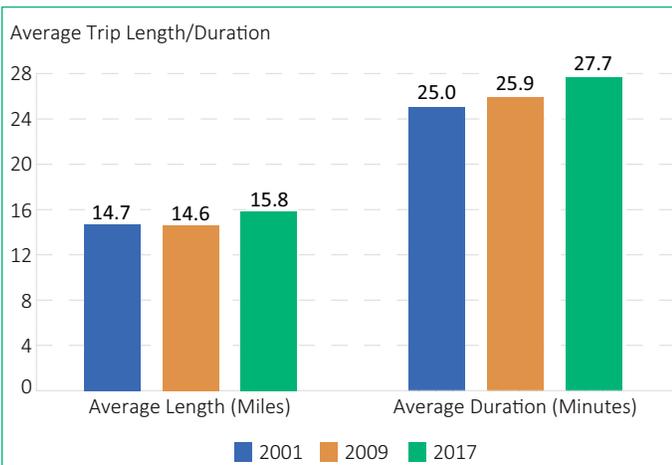


Figure 11. Average length and duration of trips to visit friends/family.⁽³⁻⁵⁾

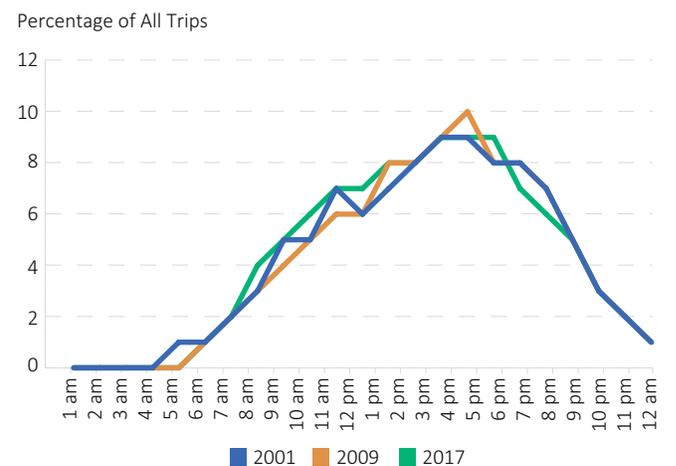
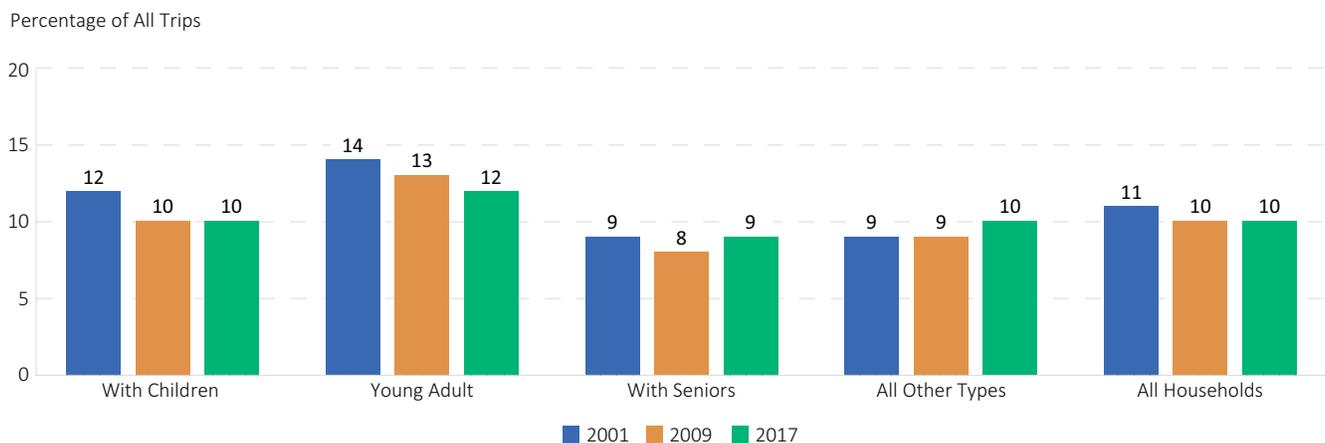


Figure 12. Trips to visit friends/family by time of day.⁽³⁻⁵⁾



*Young adults are defined as ages 18–25, and seniors are defined as ages 65+.

Figure 13. Trips to visit friends/family by household type.⁽³⁻⁵⁾

Social/Recreational

Recreational activities (e.g., movies or museums), exercise (e.g., jog, walk, walk the dog, or go to the gym), and buy meals (e.g., go out for a meal with friends).

Highlights

The proportion of trips for social/recreational purposes has grown steadily over NHTS survey years. Trips tended to average 8.6 miles but varied in duration. Social/recreational travel peaked at the 12 and 6 pm hours. Persons living in households with seniors (defined in this report as ages 65+) reported the highest level of social/recreational travel, and all households reported their highest level of social/recreational travel in 2017 in comparison to previous NHTS years.

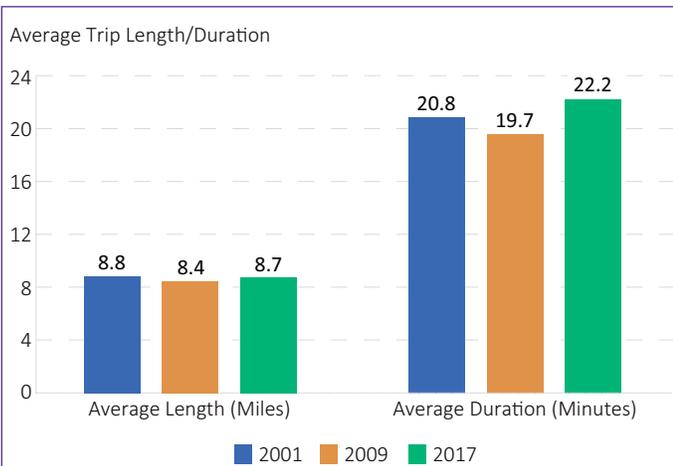


Figure 14. Average length and duration of social/recreational trips.⁽³⁻⁵⁾

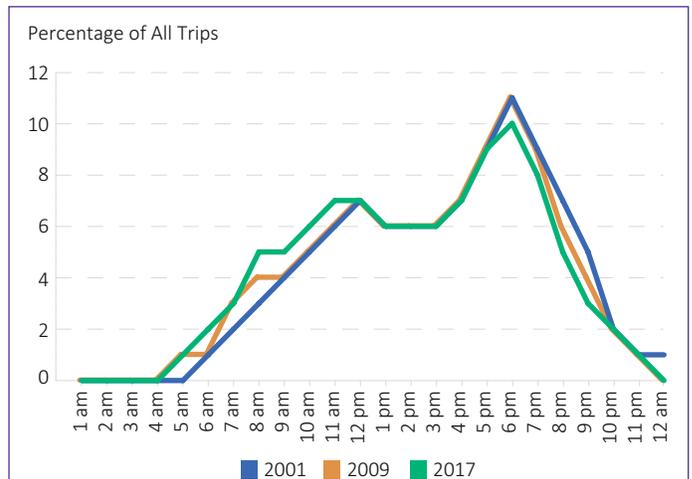
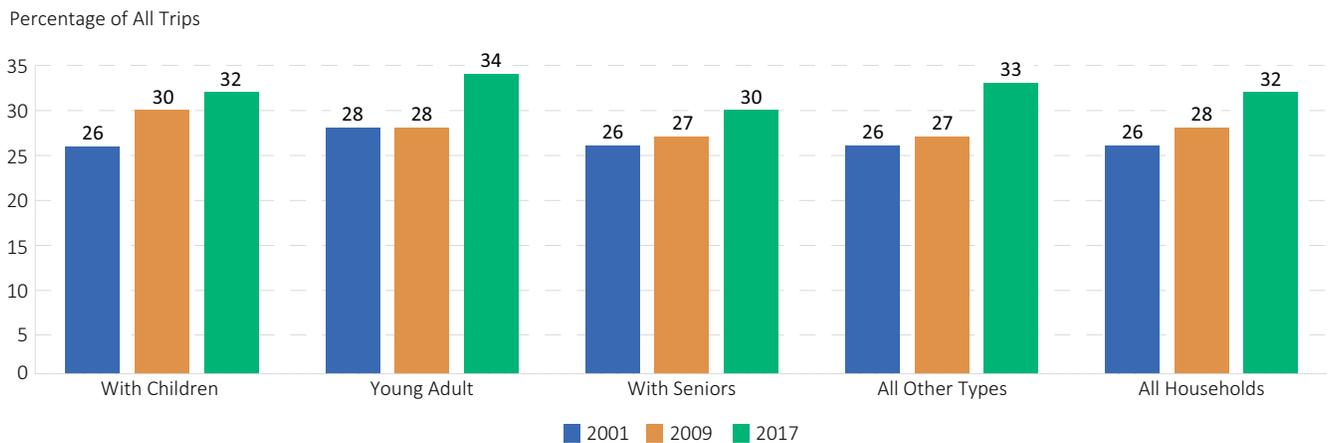


Figure 15. Social/recreational trips by time of day.⁽³⁻⁵⁾



*Young adults are defined as ages 18–25, and seniors are defined as ages 65+.

Figure 16. Social/recreation trips by household type.⁽³⁻⁵⁾

Medical/Dental

Health care visits (e.g., medical, dental, or therapy).

Highlights

Travel for medical/dental reasons comprised the smallest proportion of discretionary travel overall. These trips averaged about 8 miles for those living in urban areas as compared to 17 miles for those living in rural areas, with average durations of 22 and 30 minutes, respectively. The time of day that these trips were reported correlate with office hours (morning and afternoon, with a lunchtime closure). Persons living in households with seniors (ages 65+) were more than twice as likely to report medical/dental trips in comparison to all other household types.

Average Trip Length/Duration

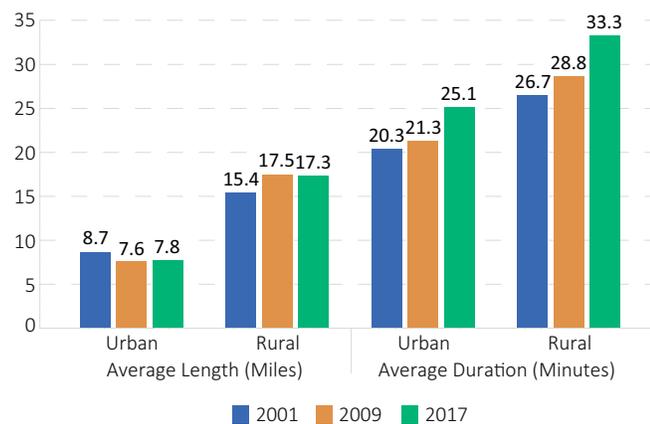


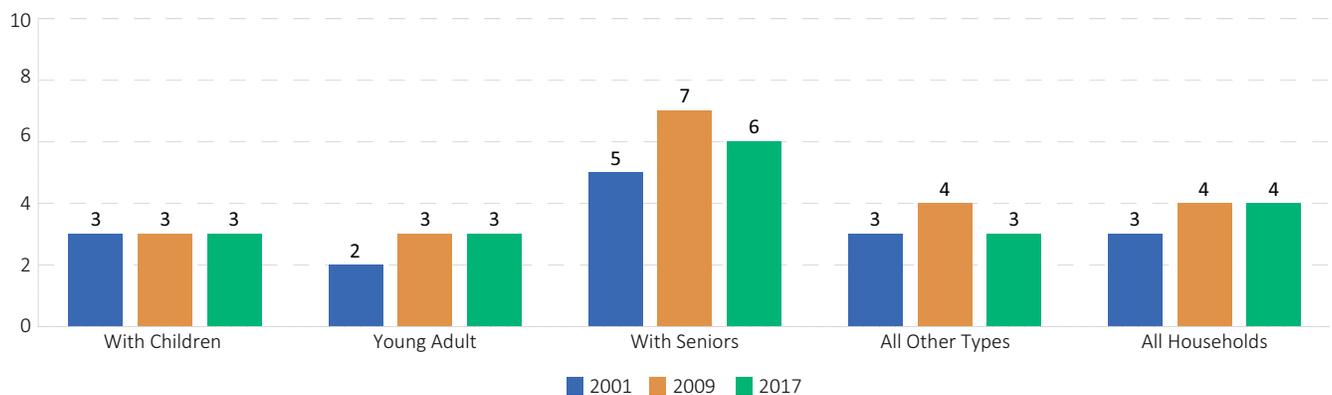
Figure 17. Average length and duration of medical/dental trips.⁽³⁻⁵⁾

Percentage of All Trips



Figure 18. Medical/dental trips by time of day.⁽³⁻⁵⁾

Percentage of All Trips



*Young adults are defined as ages 18–25, and seniors are defined as ages 65+.

Figure 19. Medical/dental trips by household type.⁽³⁻⁵⁾

Summary

Comprising 75% of weekday travel and 90% of weekend travel, trips for shopping, family/personal business, medical/dental, visiting friends/family, and social/recreation purposes varied based on day of week, time of day, type of household, and residential geography. The variations include the following:⁽¹⁻⁵⁾

- Almost two-thirds of weekday discretionary travel was for family/personal business or shopping. On the weekends, almost two-thirds of travel was for social/recreational or shopping. In addition, trips for family/personal business and medical/dental were reduced significantly on the weekend as compared to weekdays.
- Persons living in households where there were fewer vehicles than drivers reported more shopping and fewer social/recreational trips, while those living in households with more vehicles than drivers reported the opposite.
- Persons living in households in rural areas consistently reported more trips for shopping and family/personal business, while those living in urban areas reported more trips for social/recreational purposes.
- Shopping trips increased in duration over time, but the average distance remained about 7 miles. These types of trips generally took place midday, which may be related to the fact that persons living in households with seniors reported the highest proportion of shopping trips.
- Travel for family/personal business averaged 7 miles and 16 minutes. These trips tended to exhibit three distinct peaks: 7 am, 12 pm, and 3 pm. Family/personal business trips were most prevalent for those living in households with children and least likely for those living in households with young adults.
- Trips for visiting friends and family decreased in proportion over time, while trip length has increased. The 2017 data showed a trend toward these trips being reported earlier in the day. The highest proportion of trips for visiting friends and family was reported by persons living in households with young adults.
- The proportion of trips for social/recreational purposes has grown steadily over the years. There was not a clearly discernable trend in terms of trip distance or duration, but there has been consistency in the time of day these trips take place, with peaks at the 12 and 6 pm hours. Persons living in households with seniors reported the highest level of social/recreational travel and all households reported their highest level of social/recreational travel in 2017.
- Although a small proportion of daily travel, trips for medical/dental services increased in duration but not distance over time and were reported during office hours. Persons living in households with seniors were more than twice as likely to report medical/dental trips.

References

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